

Final Financial and Programmatic Report  
to the  
National Fish and Wildlife Foundation

Maine Large Whale Cooperative Management Plan  
Grant # 1999-0110-011

Submitted by  
Maine Department of Marine Resources  
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November 30, 2005



## 1. Final Financial Reporting Form

(see attached)

## 2. Final Programmatic Report

### Background

Since its inception in 2002, the Maine Large Whale Cooperative Management Plan has been an evolving work in progress. While the Maine Department of Marine Resources (DMR) continues to maintain the sightings and disentanglement networks providing an educational product for the Gulf of Maine (GOM) community and credible assistance for large whales observed to be entangled in the Northern GOM, gear modification research and development has become the primary focus of the program.

### Methods

Concerning the sightings network: Large whale sightings continued to be tracked on the DMR GIS Sightings website. In addition, DMR continued to communicate with the Northeast Science Center and the Stellwagen Sanctuary in order to maximize the site's outreach and informational capacity. Concerning the disentanglement network: Maine Marine Patrol (MMP) and Maine industry disentanglement network members received advanced training in identifying and monitoring large whales and for the disentangling of minke whales. Continued collaborations with NOAA and Provincetown Center for Coastal Studies resulted in some advanced disentanglement training of four MMP Captains. Concerning the gear research and development program: DMR continued to build upon promising results obtained from previously funded low-profile groundline research and development efforts. Maine's goal is to develop and fully test industry and whale friendly low-profile groundline options by 2008 for full implementation in 2009. Concurrently, DMR will continue to assess the risk of end lines and begin to address appropriate risk reduction measures.

### Summary Results

- **ROV Surveys:** Initial results from ROV surveys documented that the behavior of sink rope, used mostly in the western areas of the State, lies on or slightly above the seafloor. Less commonly used "neutrally buoyant" rope was observed to behave in a similar manner to sink rope. Float rope, the most widely used rope in the State, was observed to arc from 7 to 27 feet from the seafloor, with an average of 12 feet high on pairs and slightly lower on trawls. A considerable number of rocky/tidal bottom-types were filmed where gear was being fished, depicting the operational realities that any rope is subjected to in areas of high tidal action and rocky terrain. It was observed that a large number of differing variables seem to affect groundline profile - the boat's speed at the set-out; tide speed and direction relative to the set-out; depth of water; size and weight of traps; and how the traps



leave the boat. Other variables which appear to affect profile include length and type of rope; and how and where that rope is attached to the traps. Nearly forty hours of raw ROV footage and eight hours of topside video were recorded. Twenty-four lobsterboat captains and as many sternmen participated in the study. Many others were involved with the project both at dockside and while observing at-sea. A 17-minute video was produced and mailed to project participants, and was shown at the Maine Fishermen's Forum, Lobster Zone Council meetings, and the Atlantic Large Whale Take Reduction Team (ALWTRT) meeting. Many industry viewers reported surprise at the high vertical profile of the float rope and expressed interest in experimenting with low-profile gear modifications of their own.

- **Enforcement:** DMR has maintained the Maine fishing industry's high compliance with Atlantic Large Whale Take Reduction Plan (ALWTRP) measures by supporting ongoing Joint Law Enforcement Agreement activities. Maine has adopted by rule the current ALWTRP gear modification measures, and will undertake additional State rulemaking to adopt future ALWTRP gear modification rules therefore allowing for credible at-sea enforcement
- **Outreach and Education:** DMR continues to collaborate with industry, and a number of public and private entities within the State that have ongoing marine mammal conservation and education programs. Collaboration with these groups have strengthened the State's Cooperative Management Plan efforts through gear research and development experiments, network training workshops, whale identification and behavior instruction, and ALWTRP awareness-building outreach. Gear research and development results have been presented at ALWTRT meetings, Right Whale Consortium meetings, Maine Fishermen's Forums, DMR Lobster Advisory Council and Maine Lobster Zone Council meetings.
- The Cooperative Management Plan graduate student intern maintained the Maine Whale Sightings website incorporating all live and dead whale sightings. This was of particular importance during the unusual mortality events and Dynamic Area Management actions. The intern also conducted research in order to gather baseline information for a statewide endline analysis. The purpose of this analysis is to determine by geographic area, gear configuration and season the actual distribution of fishing gear deployed by Maine lobstermen. This data will be overlaid with whale sighting and foraging information in order to help determine future endline risk reduction measures.



3. Videos and Supporting Documents

(see attached)

4. Project Evaluation Report

(see attached)

Respectfully submitted,

Terry Stockwell  
DMR



**National Fish and Wildlife Foundation  
Project Evaluation Form**

Project Name and Number: Maine Large Whale Cooperative Management Plan  
Grant # 1999-0110-011

Recipient: Maine Department of Marine Resources

Project Location: Coast of Maine

- 1) Were the specific objectives as outlined in your application and grant agreement successfully implemented and accomplished? Explain.

*The Maine Large Whale Cooperative Plan is a result of the State's recognition that there is a need to enhance the survival and recovery of marine mammals that occur in Maine waters, while at the same time, protecting the economic and operational realities of Maine's commercial fisheries. In collaboration with NOAA Fisheries and the State's commercial fisheries, the DMR sightings and disentanglement networks continue to be maintained while fishing gear modification research and development efforts have become the primary focus of the program. Coast-wide lobster gear configurations and related habitats have been mapped and analyzed. As a result, multiple low-profile gear modification experiments are currently being field tested for operational viability and risk reduction effectiveness. Additionally DMR has undertaken a study to establish baseline information of endline distribution by geographic area, gear configuration and season. This information will be fundamental towards the development of endline risk reduction measures applicable to the Northern GOM (Gulf of Maine).*

- 2) Please assess project accomplishments as quantitatively as possible. For example:

- a. Number of miles of stream/river corridor benefited. Categorize by type of benefit (e.g., protected, enhanced, restored, made accessible).
- b. Total acres of land conserved. Categorize by conservation mechanism (e.g., restored, managed, acquired, placed under an easement) and by habitat type (e.g., wetland, deciduous forest, shortgrass prairie).
- c. Species benefited. If possible, report number of individuals of each species.
- d. Number of meetings/events held.
- e. Presentations made.
- f. Publications and extent of distribution.
- g. Other



*Including its islands, the State of Maine has approximately 5500 miles of coastline, 7000+ licensed commercial lobstermen and at least 22 species of marine mammals and turtles that are known to frequent the waters of the GOM. Among these are multiple species of special concern, including five species of federally endangered large whales (Northern Right, Humpback, Finback, Sei, Sperm) and three species of federally endangered turtles (Ridley, Leatherback, Loggerhead). Large whale sightings continue to be tracked on DMR's GIS Sightings website providing an educational product for the public. The trained Maine Marine Patrol and industry (52 officers, 100+ industry trained first responders, 44 industry trained to level 2 and 8 industry advanced trained with equipment caches) disentanglement network members continue to provide credible standby assistance for whales observed to be entangled in Maine waters. In addition, four Marine Patrol Captains have received additional advanced training. There are currently over 150 industry members from 30 different ports along the entire coast volunteering to test experimental rope designs and gear configurations. Bi-monthly columns in Commercial Fisheries News, presentations at the Right Whale Consortium meeting, the ALWTRT meetings; the Maine Fishermen's Forum; the DMR Lobster Advisory Council; the Lobster Zone Councils; as well as materials distributed to individual lobstermen on request have provided substantive program outreach and public education.*

- 3) Assess the number of people reached through your work (e.g., landowners, students, organizations, agencies) Did other land managers benefit from the project?

*Through the State's seven Lobster Zone Councils, two Lobster Associations, the Maine Fishermen's Forum, the ALWTRT meetings, television exposure, local, state, and national press, and hundreds of informal discussions, it is presumed that the vast majority of licensed Maine lobstermen (7000+) and countless general public were made aware of the Cooperative Management Plan effort.*

- 4) Were any surveys or interviews conducted with partners to help gauge the success of your efforts?

*Though no formal surveys have been distribute;, logbooks, feedback and input from lobstermen have been solicited throughout the gear modification research and development efforts. Follow-up conversations with industry, ALWTRT members and NOAA Protected Resource staff have resulted in DMR continuing to update and modify the conservation plan efforts to best protect the whales and the Maine fishing industry.*

- 5) How will the project be evaluated in terms of monitoring or assessment of cause-and-effect response? Describe the evaluation timescale (e.g., one year, five years, ten years). How will monitoring results be reported?

*DMR will quantify results and success of the program by requiring that all lobstermen who participate in the field-testing of experimental fishing gear allow DMR and or NOAA field staff on their vessels as onboard observers for at sea documentation. In addition, project participants are required to maintain logbooks. DMR staff have observed multiple days at sea, and are in the process of collecting and collating logbook data. ROV surveys have and will continue to be used to obtain visual documentation of the gear and habitats, as well as to inform and educate the industry and greater*



*community. Summary reports have and will be created and the results critiqued for risk reduction performance by members of the fishing industry, NOAA and the ALWTRT. The program's goal is to develop operationally viable, low-risk fishing gear modification options to be fully reviewed by the ALWTRT by 2008, so that NOAA may implement any proposed ALWTRT recommendations by 2009.*

- 6) Does this project fit into a larger program, spatially or temporally? If so, how has that program benefited from your work? (For example, an easement or on-the-ground work that connects or benefits other protected properties.)

*The Maine Cooperative Management Plan Recovery has metamorphosed into a more comprehensive State Recovery Plan. Although the Cooperative Management Plan includes programs for sightings, disentanglement, and gear modification research specific for large whales; the State Recovery Plan includes foraging studies as well as stranding response programs for pinnipeds, cetaceans and sea turtles. The gear modification component of the program has built upon the continued procurement of gear and habitat data enabling the development and testing of viable risk reduction measures designed to eliminate the threat of entanglements.*

- 7) Does the project incorporate an adaptive management component? If so, please explain. Any lessons learned that will guide future implementation of this, or similar, projects?

*The Maine Large Whale Cooperative Management Plan is an evolving work in progress. The continued maintenance of the sightings and disentanglement networks provides an educational product for the GOM community and credible assistance for whales observed to be entangled in the Northern GOM. Operationally realistic gear modification options, which protect both the industry and the large whales, will be the result of DMR's continuing collaboration with industry, NOAA and members of the ALWTRT. Extensive field testing by hundreds of lobstermen will result in the involvement of a large percentage of the State's 7,000+ licensed commercial lobstermen.*

- 8) Was there a local/regional/national response? Any media/press involvement?

*This program has been featured prominently in local, regional, state, and national press. (Articles and video included in report package.)*

- 9) To what degree has this project contributed to the conservation community as a whole?

*This program has provided the ALWTRT, including members of the conservation community, federal and state managers, whale biologists and fishermen, a clear picture of intent of the State's recognition that there is a need to enhance the survival and recovery of marine mammals that occur in Maine waters, while at the same time, protecting the economic and operational realities of Maine's commercial fisheries. The program focused upon the development of operationally viable gear modifications applicable for the rocky/tidal habitat fished by Maine lobstermen along many parts of the coast. As a result, the dialogue between management, conservationists, and fishermen has improved and additional collaboration and research is planned.*



10) Did your work bring in additional partners, more landowners, et cetera, who would be interested in doing similar work on their land in the future? If so, please describe.

*An increasing number of the Maine lobster industry have gotten involved in the collaborative DMR/NOAA gear modification research projects as a result of the survey and gear experimentation efforts .*

11) Do you have any suggestions for NFWF to guide improvement of our project administration?

*It must be highlighted that due to severe state budget restrictions, DMR administrative and financial staff are in the process of being downsized and consolidated with four other natural resource agencies. The end result will be that all future grant applications and subsequent reports will be more difficult for DMR staff to prepare and submit. NFWF staff has been very accommodating and helpful, however, DMR would like to explore new ways to simplify and expedite the process. In addition, due to the evolving nature of the program, DMR would like to explore ways to simplify requests to modify the work plan due to changes in program priorities determined by NOAA.*

**Please share any additional information that you feel is important to the evaluation of your program.**

*It is important to understand that the Maine Large Whale Conservation Plan is an ongoing and rapidly developing program that strives to accommodate Federal mandates and priority shifts resulting from the evolving ALWTRP.*